The PSYCHOLOGY of MASS FORMATION

By NIKOLA TESLA

TOUCHING ELBOWS WITH FELLOW COMPATRIOTS the SENSE OF FEAR IS MOMENTARILY ALLAYED

EVERY ONE OF THOSE DIM-LIMNED GRAVE STONES WAS A POTENTIAL GHOST

WHEN I was a boy and chance or an unavoidable predicament made it necessary for me to walk past a graveyard after dusk of an evening, I began whistling as I approached and continued until my lips were swollen—or walked a mile out of my way to get well around it.

But even with all my whistling in a boyish attempt to prod a recreant courage, my legs nevertheless were pretty wabbly and my knee action was not of the show-ring class. My heart, too, ungallantly huddled up in a corner and went on strike, so that there wasn't much blood in circulation to keep me warm, and quite as a matter of course I got "cold feet."

In the nervous tension my scalp contracted so that my hair felt as if it was so many pricking needles, goose flesh writhed in creepy lines over my body, while my spine seemed like nothing so much as an animated icicle and my nerves were rasped by the demon of fear, for, mind you, every one of those dim-limned gravestones was a potential ghost that might at any instant raise its uncanny arms and sweep awesomely out and claim me for its own.

Did you ever pass a graveyard at night when alone? And didn't you feel just about that way when you did?

Much as I might wish to be a boy again, I should not ever care to have to pass a graveyard at night—alone.

There has been so much said and written pro and con in discussing the tactics of the Germans in sending their forces at the enemy in what is known as the "mass formation" that it seems as if little could be added to the argument.

But there is a human side to this policy that so far has not been presented; not to my knowledge, at least.

It is a simple phase of the question that has to do with the element of human nature; the mental process of the mass, as disclosed by the individual as its unit.

Why is it that the man who quakes with fear at the approach of an impending battle quite often, as the records show, is the one who goes in at the charge with apparently the daredevil recklessness and disregard for danger that distinguished him among his comrades as the man unafraid or as being "crazy with the heat"—of battle?

However, before he attains to this degree of courage and comes eventually to be stricken with battle fever he must have been divorced from his sense of fear by some process or association aside from his conscious control. Fear and the concrete evidence of bravery are seldom if ever combined in any hazardous undertaking, and especially in the case where the individual faces the enemy in battle or other mortal danger—unsupported and alone.

And that brings us again to the weird and fearsome specters that take form in the dreadful dark, along the silent and deserted road at the edge of the ghost-haunted graveyard.

It is interesting, and not a little amusing, now that I (and we are all pretty much alike in that respect) look back over the years and coldly analyze the mental attitude in which under the curtain of night I hesitatingly approached, tremblingly passed and thankfully left behind those harmless and sacred villages of the dead at the time I was an impressionable lad.

For, you see, when fortune favored me with companions on the infrequent occasions of my nocturnal journeys past the old graveyards, even if it were only a small boy not yet old enough to recognize the possibilities of a ghost in a dusk-shrouded tombstone, my courage always retained enough stamina to carry me through the otherwise nerve-shredding ordeal—without having to resort to the expedient of whistling myself out of breath, at any rate.

There might be prowling ghosts over there in the lowering dark of the somber aisles running through the shrubs and the weeping willows—but what fellow should be afraid of ghosts with a faithful comrade touching elbows at his side?

However, on occasions when there was a company of us, four or six or more boys, that walked together along the graveyard road, why, there just simply were no ghosts at all.

But if one of us had by some fortuity become separated from the main body and suddenly realized that he was stark alone among the momentous possibilities of his ominous surroundings, his false keyed bravado would instantly have lost its grip and hit bottom with a plunk.

The chances are, as a matter of fact, that he would have been "scared stiff"—too stiff to get out of his tracks—for the moment, at least. And, quite unblushingly, I am assuming that that boy must have been myself.

And, as for any of us to have ventured in the circumstance to go in there alone—quite unthinkable, I assure you.

But what, you are asking, has all this to do with the question of the German general war staff's tactics when storming a fortress or charging the battle line in sending their troops at the enemy in close order or "mass formation?"

Well, the man is the boy and the boy is the man, and the mental attitude of the soldier in relation to battle is precisely that of the boy and the night-veiled graveyard.

With this difference, all boys, unless it be the occasional exception that proves the rule, are naturally obsessed with childish fear of ghosts and graveyard phantoms created in their fertile imagination. Most men outgrow such baseless fears, and some, I cannot undertake to say what per cent, have by natural development, will power or self-control outgrown the sense of fear to such an extent that it does not manifest itself when in the face of danger.

But there are those of us in whom fear quickly and prominently develops or recurs when our life is placed in imminent peril. And such men are in the majority, very probably. The world calls them "cowards." Possibly that is an appropriate generalized term, though it should be gingerly applied in the case of the man who strives but is unable to overcome a natural feeling of fear. There should, too, be qualifying distinctions, as, for instance, the moral coward, as distinguished from the "physical" coward; the coward of conscience and the coward of principle.

The moral coward may not ever have experienced the sense of fear, or vice versa.

It is the rare exception, however, when a man will voluntarily admit fear of physical danger before the enemy. And it would needs be a graceless coward indeed who should confess that he would be afraid to enlist under the colors if called upon for the defense of his country.

Certainly an overwhelming majority of us, whether or not we are sufficiently candid to admit it, experience the sense of fear in a greater or less degree when we mentally place ourselves within range of the enemy's flesh-mangling shrapnel, parrying the vicious thrust of a bowel-ripping bayonet or dodging the decapitating swing of a cavalryman's saber.

And there are many of us who, if we were about to be placed in such a position, would—flinch, to say the least. And then there are those, no one will ever know what proportion of the whole, who when ordered into action would drop out, flop over and play 'possum or just plain "beat it," providing he could do so without attracting the attention of his more loyal comrades or being detected by his officers, which last eventuality he knows would result in a quick dealt penalty of death.

Even if so disposed, such a getaway could, of course, be effected only in a thin line of troops advancing in open or extended order, where the chances of or opportunities for detection would be minimized, and where, too, such action would be likely to occur, because the individual is deprived of the moral support and psychological encouragement of elbow-touching comrades to spur him on.

It is in the cognizance of this element in human nature, which is concrete rather than abstract, that the German commanders show their fine understanding of this phenomenon of temperamental idiosyncrasy, the mental attitude, if you please, of the soldier facing the enemy, for, after all, the soldier is only the average citizen in uniform.

And this particular attitude of the soldier is the story, all over again, of the boy and the dark and the graveyard road. Alone and unsupported, he is the victim of fear. Touching elbows with fellow compatriots, the sense of fear either is momentarily allayed, or shame prevents an open display of it. Almost any man would accept the challenge of the risk in such environment rather than be called a coward by his comrades—or to be shot as such by a watchful officer.

It is the understanding of this fact, for it is a fact, not a theory, that justifies and possibly compensates the Germans in their tactics of charging the enemy en masse.

And then, too, the military experts, and even the layman, has learned that with the great advances made both in offensive and defensive means in modern warfare, the battles are won by masses rather than by the individual as the unit. When a certain objective is aimed at the commanders, having millions of men in hand and more in reserve, coldly calculate the sacrifice of many men to reach it, and to do so hurl men in solid masses at the enemy with the purpose of breaking him by sheer weight of numbers.

The battle value of the individual as developed in wars of the past, when musket, bayonet and saber were prominent factors, is largely lost in the face of ultra-modern machinery devised for wholesale killing, which demands the co-operation of masses rather than the distinguishing activities of the individual. Such machinery makes for barbarism and brutal slaughter rather than civilized warfare, if war can be considered a civilized institution, but in this day of a blood-red continent it is a part of the game, and we must perforce accept it.—New York Press.

INDIAN TROOPS IN ACTION

Although mainly Mohammedan, the Indian native army embraces men of the most varying religions, sects and races. Its normal strength in round figures is 160,000 men, but this does not include (about) 22,000 imperial service troops, 35,000 reservists and 39,000 volunteers.

The officers, of course, are British, but every regiment has its native officers, known respectively as risaldars, subahdars and jemidars. A risaldar is the native commander of a troop of cavalry, while the subahdar and jemidar rank respectively as captain and lieutenant—among themselves, that is, for in no circumstance does a native captain exercise any command over a British lieutenant. The Indian soldiers whose names are most familiar to the British public are the Sikh, the Rajput, the Gurkha and the Pathan.

It was the Sikh, of course, who put up such a tremendous fight against England years ago, but who, once conquered, has ever since proved the loyalest of the loyal. Originally of Hindu origin, the Sikhs as a religious sect were founded by Nanak Shah in the fifteenth century, and reached the zenith of their military and political power under the famous Ranjit Singh (1780-1839). The Sikh is not born a Sikh, but is admitted or initiated as one when he reaches early manhood, from which date he never cuts his hair, and always wears an iron bangle on his wrist. By their religion, the Sikhs are forbidden to use tobacco in any shape or form. Equally at home in the saddle or on foot, the Sikh is a magnificent fighting man, and an awe-inspiring figure with his big beard, and great mustache curled up behind his ears.

"Rajput" means literally, "son of a king," and the Rajputs are an intensely proud, reserved and silent race. They are the world's finest horsemen, bar none, though they do not disdain to serve in infantry regiments. They are very tall, upstanding men of magnificent "presence" and haughty demeanor, for they never forget or allow the spectator to forget that they are of royal blood. Inside his turban the Rajput carries a steel circlet with sharp edges, and this he can hurl or throw with such deadly accuracy and force as to decapitate an enemy at many yards distance.

Kipling has made us familiar with the Gurkha, who is "blood-brother" to the Highlanders, and the most cheerfully bloodthirsty little "devil" going. The Mongol descent shows itself in his broad, flat features and squat frame, and the contrast between him and the lordly Sikh or Rajput is comical in the extreme.

OFFICERS SWORN IN

NEW STATE OFFICIALS INSTALLED FOR DUTY.

HOLLENBECK GIVES OATH

New Chief Justice Sat for First Time —Legislators Approve Governor's Message.

Lincoln.—New officers of the state were inaugurated before a joint session of the two houses of the state legislature and Governor Morehead delivered his inaugural address. Officers for the coming two years were sworn by the chief justice, Conrad Hollenbeck, who was previously sworn in and sat for the first time in the court session. The state officers, with Governor Morehead, who were sworn in, are:

Governor John H. Morehead, Lieutenant Governor James Pearson, Secretary of State Charles W. Pool, Auditor William H. Smith, Treasurer George E. Hall, Superintendent A. O. Thomas, Attorney General Willis E. Reed, Land Commissioner Fred Beckman, Railway Commissioner Thomas L. Hall.

The house was well filled and the galleries crowded when Lieutenant Governor McKelvie stepped to the chair and called the joint session together, the last act of the outgoing lieutenant governor. It took Governor Morehead about an hour to read his message, which was listened to attentively. Many of his recommendations seemed to meet with hearty approval by the legislators.

Fix Time of Sessions.

Sessions of the house will be from 9 in the morning until 12 and from 1:30 in the afternoon until 3, when the committees will meet and work until 6. Employes were cut down from seventy-five to thirty-one and the mailcarriers and postmasters eliminated. In place of these a substation of the postoffice will be established during the session. There will be fewer committees and fewer members to each committee.

Automobile Instruction Popular.

Automobile instruction in Nebraska is a popular thing if the enrollment at the college of agriculture is any indication. The number of students has more than doubled within the last two years. Last year when such instruction was first offered, 30 students enrolled. This year there are 75. Aside from the lectures, actual repair work is done on cars brought in for practice.

Water Power Report Accepted.

At the suggestion of Speaker Jackson, former Representative J. McAllister of Dakota county was given time in the house to explain the report of the special commission to investigate water power, of which he is chairman.

The house voted to accept the report and order 500 copies printed for the members of the legislature and general distribution.

Rural Credits Question.

Rural credits legislation has been brought to the front in a resolution offered in the senate by Beal of Custer. He asks that congress be reminded that the step is promised in the platforms of all parties and that passage of the proper bills would aid agriculturists and stock raisers of the west.

Short Course at State Farm.

During the regular vacation of classes at the university farm, preparations are being made for the opening of the winter short course of six weeks of the university school of agriculture which begins this week.

Hog Barns at Fair Grounds.

The only permanent building which the state board of agriculture will ask the legislature to build on the fair grounds during the year 1915 is a modern hog barn. It is estimated that the building and grading will cost $80,000.

W. F. Frisbee, State Chemist.

W. F. Frisbee of Des Moines has been appointed state chemist in connection with the pure food department of the state to fill the vacancy caused by the resignation of E. L. Redfern.

Fries, Dean of Legislature.

Soren M. Fries of Dannebrog is the dean of the legislature in years of service. He is now a member of the house for the sixth time.

Tanner Loses Place.

Senator Quinby of Douglas sprung a sensation soon after the senate was called to order by an amendment substituting the name of E. W. Miller of Omaha in place of that of "Doc" Tanner of South Omaha, who had been agreed on in caucus as clerk of the engrossing committee, and after a wordy battle indulged in by members of the Douglas county delegation, in which Dodge took a hand, Tanner was defeated by a vote of seventeen for Miller to fifteen for Tanner.

REPORT OF BOARD OF CONTROL

After Careful Analysis of Problem Body Suggests Best Way to Handle State's Dependents.

Sterilization of the mentally defective at the Institute for the Feeble-Minded youth at Beatrice and at the asylums at Lincoln, Norfolk and Hastings is the recommendation made by the Board of Control in the biennial report which that body has filed with the governor. The board's report is a careful analysis of the whole complex problem of how the state may best handle its large dependent, defective and criminal classes, which, the report shows, have increased over 12 per cent in the last two years.

It recommends in regard to the girls' industrial school that the age at which a girl reaches her maturity be raised from 18 to 21 years, for the board holds this period in a girl's life to be more critical than any other.

The report terms it "somewhat of a mockery" to send criminals forth from the penitentiary with a skill in an occupation that is pursued nowhere in the state outside of the penitentiary. In this connection it advises a reformatory and explains its failure to provide one in pursuance with the appropriation of $150,000 granted by the last legislature as due to the fact that the amount of the appropriation was too small.

The alternative of a twine factory as provided by the last legislature did not appear feasible to the board which did not consider twine making a desirable employment for the prisoners.

Dropping of the word "non-resident" from the alien land law of the state is proposed in a bill to be introduced at the session at the request of W. D. Schaal of Springfield. Mr. Schaal insists that this apparently insignificant change will remedy what he deems the evils of the present system, that of allowing resident aliens to own land in this state. He wants to force all aliens who own land and are enjoying protection and prosperity of the state to become citizens of the country.

Chiropractics seek the enactment of a law such as some other states have passed, recognizing the "science of chiropratic" and placing the profession on a plane with osteopathy. In order to do this they ask the legislature to create a state board of examiners, whose duty it shall be to examine all persons who may wish to practice the chiropractic science in Nebraska.

A movement is on foot to bring Thomas Tynan, warden of the Colorado penitentiary, to this state to talk to the legislature upon making good roads. A Nebraska law was passed two years ago intending to provide for such work, but it proved in such shape that it has not been availed of. If Mr. Tynan comes, it will probably be this month.

A motion to have members of the senate who had official matter to mail out submit such matter to the secretary of the senate to be stamped and mailed was passed. This is in accord with reform recommendations of the joint committee appointed two years ago and the plan is designed to save postage to the senate.

A bill to be introduced at this session of the legislature will give the Omaha metropolitan water district the right to enter into the manufacture and sale of electricity, upon affirmative vote of the citizens of the district, and will give the water district a full opportunity to compete with private enterprises of that city.

The committees chosen to select standing committees in the house and senate are widely different in makeup. The house committee is frankly progressive, headed by J. N. Norton of Polk, one of the most radical members. The senate committee is headed by Phil Kohl of Wayne, a conservative democrat.

Reports from the eight state league baseball cities by President Miles indicate there will be concerted action in the legislature asking for an amendment of the law making it legitimate to play the national game on Decoration day after 2 o'clock in the afternoon.

To establish a system of state life insurance and annuities in Nebraska similar to the plan in operation in Wisconsin and Massachusetts is the purpose of a bill which will be introduced in both branches of the legislature.

Speaker Jackson, J. N. Norton and W. C. Parriott form the house committee on rules.

Sentiment in favor of cutting down the number of bills introduced at this session of the legislature had its first expression in the lower house, when Richmond of Douglas offered a resolution designated to eliminate all duplicate measures after their introduction and before the bills are printed at state expense. The resolution recites that there has been great waste of public money at past sessions of the legislature in printing bills which actually or practically duplicate one another.